

PROJECT TITLE : SAVOURY
PERIOD COVERED : OCTOBER 23 - NOVEMBER 27, 1981
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The purpose of Project SAVOURY is to prepare flavours which, when pyrolyzed with sheet or tobacco, give Burley-type flavour characteristics.

YEAST HYDROLYSES

Hydrolyses of different yeasts grown on different culture media (yeast disruption - protein hydrolysis - amino acids), were conducted at reflux for 110 hours in the following conditions :

- a) Standard hydrolysis with hydrochloric acid 6N (12 litres).
- b) Standard hydrolysis with phosphoric acid 45N (12 litres).
- c) Standard hydrolysis with sodium hydroxide 6N (12 litres).

This was done in order to determine the influence of the different culture media on amino acid delivery.

SEMI-INDUSTRIAL SCALING-UP

Concerning our pre-engineering study, two suppliers were asked to propose an installation for the production of our standard toasted flavour.

Our pre-engineering study is based on the scheme in Figure 1.

The main apparatus used to produce the standard toasted flavour is as follows :

1. Reactor, capacity of 100 to 200 l (made of stainless or enamelled steel) with shaker, steam jacket and a 3m²-condenser.
2. Two filtration systems based on synthetic material pads placed on PTFE (TEFLON) grids.
3. 50-l reactor with shaker and mixer.

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4. 50-l glass reservoirs.
5. Glass columns for ion-exchange.
6. 20-l capacity rotary evaporation system using a vacuum.
7. 50-l reactor (made of glass) with shaker, steam jacket and condenser.

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PAG/jig/DECEMBER 1, 1981

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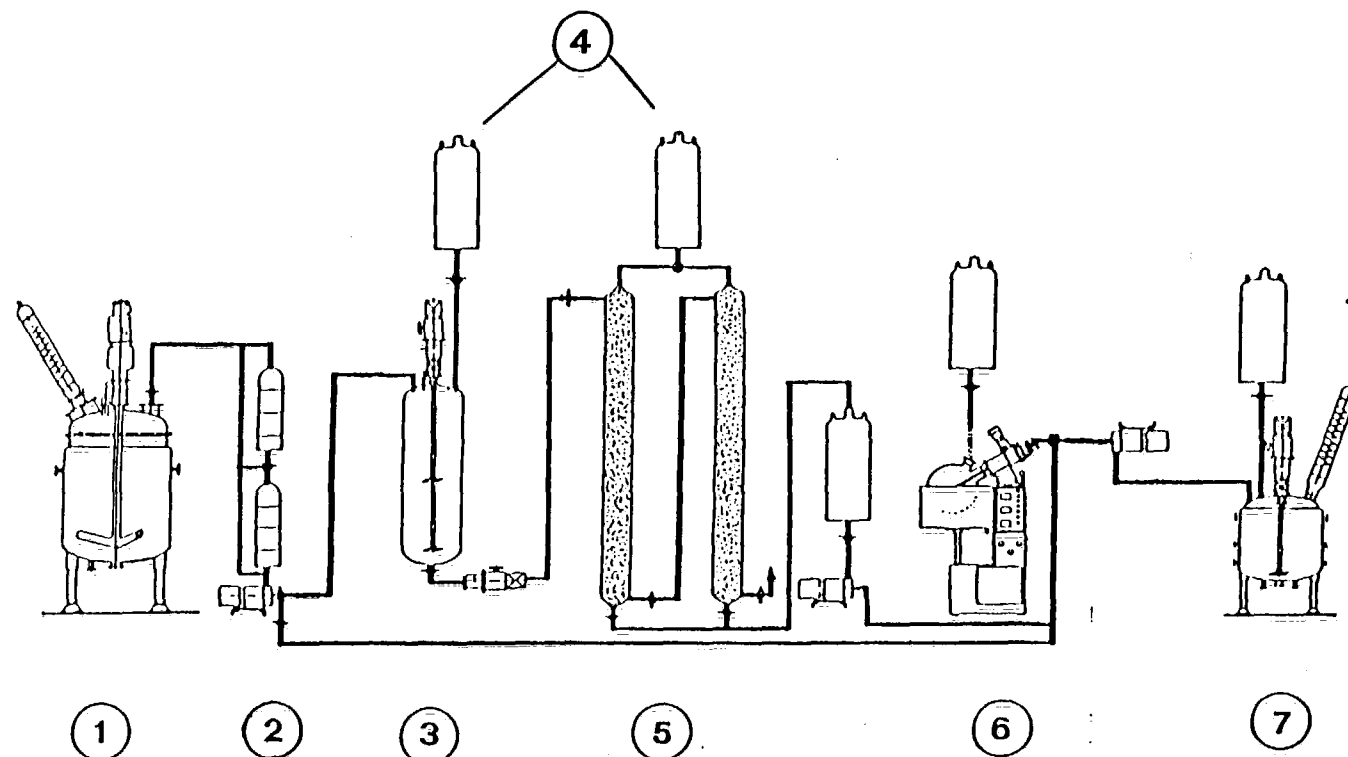


Figure 1 : Main apparatus used to produce the standard cooked flavour

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